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Applicant: Lorin R. DeBonte, et al.

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## SUPPLEMENTAL PRELIMINARY AMENDMENT

: FATTY ACID DESATURASES AND MUTANT SEQUENCES THEREOF

Prior to examination, please amend the application as follows:

## In the specification:

Please replace the paragraph beginning at page 6, line 4 with the following rewritten paragraph:

--Figure 2 shows the nucleotide sequences for a *Brassica* Fad2-D wild type gene (Fad2-D wt; SEQ ID NO:9), IMC129 mutant gene (Fad2-D GA316 IMC129; SEQ ID NO:11), Fad2-F wild type gene (Fad2-F wt; SEQ ID NO:13), Q508 mutant gene (Fad2-F TA515 Q508; SEQ ID NO:15) and O4275 mutant gene (Fad2-F GA908 O4275; SEO ID NO:17).--

Please replace the paragraph beginning at page 6, line 9 with the following rewritten paragraph:

--Figure 3 shows the deduced amino acid sequences (SEQ ID NOS:10, 12, 14, 16, and 18) for the polynucleotides of Figure 2.--

Please replace the paragraph beginning at page 10, line 29 with the following rewritten paragraph:

--Preferred mutations are in a region of the nucleic acid encoding an amino acid sequence motif that is conserved among delta-12 fatty acid desaturases or delta-15 fatty acid desaturases, such as a His-Xaa-Xaa-Xaa-His motif (Tables 1-3). An example of a suitable region has a